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conditioning signals including instructions to control how long the peripheral light element displays the one or more colors.

- 9. The head-mounted display apparatus of claim 1, wherein the processor generates the display image including one or more colors, and the processor generates, in response to the display image including one or more colors, the set of peripheral conditioning signals including instructions to instruct the peripheral light element to display colors corresponding to at least some of the one or more colors in the display image.
- 10. The head-mounted display apparatus of claim 9, wherein the processor is operable to:

divide the display image into a plurality of regions;

determine a dominating color, of the one or more colors, $_{15}$ for each region; and

generate the set of peripheral conditioning signals including instructions to instruct the peripheral light element to display the dominating color.

- 11. The head-mounted display apparatus of claim 1, 20 wherein the peripheral light element is selected from a group consisting of: light emitting diodes, electro luminescent displays, and organic light emitting diodes.
- 12. The head-mounted display apparatus of claim 1, wherein the peripheral light element is located at a distance ²⁵ from the display and the light from the peripheral light element is conveyed to the periphery of the display by optical fibers or light pipes.
- 13. The head-mounted display apparatus of claim 1, further comprising:
 - a user interface including one or more controls for inputting user instructions; and wherein the processor is operable to alter, based at least in part on the user instructions, the set of peripheral conditioning signals.
- 14. The head-mounted display apparatus of claim 1, further comprising a diffuser located in the light path between the peripheral light element and the user, the diffuser operable to soften the light emitted by the peripheral light element.
- 15. A computer-implemented method for projecting a 40 source image in a head-mounted display apparatus, the head-mounted display apparatus having a display operable to project a display image viewable by a user and a peripheral light element positioned to emit light of one or more colors in close proximity to the periphery of the display, the method 45 comprising:

receiving data representing a source image;

generating, based on the data representing the source image, a display image;

generating, based at least in part on the data representing 50 the source image, a set of peripheral conditioning signals to control colors emitted from the peripheral light element:

displaying the display image on the display; and

using the set of peripheral conditioning signals to control 55 the peripheral light element.

- **16**. The method of claim **15**, wherein receiving the data includes accessing a memory device in the head-mounted display apparatus.
- 17. The method of claim 15, wherein generating, based on 60 the data representing the source image, the display image includes generating the display image with an aspect ratio of 16/9.
- 18. The method of claim 15, wherein generating the set of peripheral conditioning signals includes generating instructions to control which one or more colors to cause the peripheral light element to display.

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- 19. The method of claim 18, wherein generating the set of peripheral conditioning signals includes generating instructions to control how long the peripheral light element displays the one or more colors.
- 20. The method of claim 15, wherein the generating, based on the data representing the source image, the display image includes generating the display image including one or more colors, and generating, in response to the display image including one or more colors, the set of peripheral conditioning signals including instructions to instruct the peripheral light element to display colors corresponding to at least some of the one or more colors in the display image.
- 21. The method of claim 15, wherein generating, based on the data representing the source image, the display image includes:

dividing the display image into a plurality of regions; determining a dominating color, of the one or more colors,

for each region; and

generating the set of peripheral conditioning signals including instructions to instruct the peripheral light element to display the dominating colors.

- 22. The method of claim 15, wherein the peripheral light element is selected from the group consisting of: light emitting diodes, electro luminescent displays and organic light emitting diodes.
 - 23. The method of claim 15, further comprising: receiving instructions from the user about how to generate the set of peripheral conditioning signals.
- 24. The method of claim 15, further comprising: diffusing the light emitted by the peripheral light element before the light reaches the user.
- 25. A computer program product, stored on a non-transitory machine-readable medium, for projecting a source image in a head-mounted display apparatus, the head-mounted display apparatus having a display operable to project a display image viewable by a user and a peripheral light element positioned to emit light of one or more colors in close proximity to the periphery of the display, the computer program product comprising instructions operable to cause a processor to:

receive data representing a source image;

generate, based on the data representing the source image, a display image;

generate, based at least in part on the data representing the source image, a set of peripheral conditioning signals to control the peripheral light element;

display the display image on the display; and

use the set of peripheral conditioning signals to control colors emitted from peripheral light element.

26. The computer program product of claim **25**, wherein the instructions further cause the processor to:

generate the display image including one or more colors;

- generate, in response to the display image including one or more colors, the set of peripheral conditioning signals including instructions to instruct the peripheral light element to display colors corresponding to at least some of the one or more colors in the first image.
- 27. The computer program product of claim 26, wherein the instructions further cause the processor to:

divide the display image into a plurality of regions;

determine a dominating color, of the one or more colors, for each region; and

generate the set of peripheral conditioning signals including instructions to instruct the peripheral light element to display the dominating color.

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